

# Summary

Production Name	NAT10 (7015) Rabbit Monoclonal Antibody	
Description	Rabbit Monoclonal Antibody	
Host	Rabbit	
Application	WB	
Reactivity	Human, Mouse, Rat	

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

### Immunogen

Gene Name	NAT10 {ECO:0000255 HAMAP-Rule:MF_03211}
Alternative Names	ALP; hALP; N acetyltransferase like protein; NAT10; NET43;
Gene ID	55226.0
SwissProt ID	Q9H0A0.Recombinant protein of human NAT10

### Application

Dilution Ratio	WB: 1:1000
Molecular Weight	116kDa

# Background

# Product Name: NAT10 (7015) Rabbit Monoclonal Antibody Catalog #: AMRe14414



Has protein acetyltransferase activity in vitro. Can acetylate both histones and microtubules. Histone acetylation may regulate transcription and mitotic chromosome de-condensation. RNA cytidine acetyltransferase that catalyzes the formation of N(4)-acetylcytidine (ac4C) modification on mRNAs, 18S rRNA and tRNAs (PubMed:<a href="http://www.uniprot.org/citations/25411247" target=" blank">25411247</a>, PubMed:<a href="http://www.uniprot.org/citations/25653167" target=" blank">25653167</a>, PubMed:<a href="http://www.uniprot.org/citations/30449621" target=" blank">30449621</a>). Catalyzes ac4C modification of a broad range of mRNAs, enhancing mRNA stability and translation (PubMed: <a href="http://www.uniprot.org/citations/30449621" target=" blank">30449621</a>). mRNA ac4C modification is frequently present within wobble cytidine sites and promotes translation efficiency (PubMed: <a href="http://www.uniprot.org/citations/30449621" target=" blank">30449621</a>). Mediates the formation of ac4C at position 1842 in 18S rRNA (PubMed: <a href="http://www.uniprot.org/citations/25411247" target=" blank">25411247</a>). May also catalyze the formation of ac4C at position 1337 in 18S rRNA (By similarity). Required for early nucleolar cleavages of precursor rRNA at sites A0, A1 and A2 during 18S rRNA synthesis (PubMed:<a href="http://www.uniprot.org/citations/25411247" target=" blank">25411247</a>, PubMed:<a href="http://www.uniprot.org/citations/25653167" target=" blank">25653167</a>). Catalyzes the formation of ac4C in serine and leucine tRNAs (By similarity). Requires the tRNA-binding adapter protein THUMPD1 for full tRNA acetyltransferase activity but not for 18S rRNA acetylation (PubMed: <a href="http://www.uniprot.org/citations/25653167" target=" blank">25653167</a>). In addition to RNA acetyltransferase activity, also able to acetylate lysine residues of proteins, such as histones, microtubules, p53/TP53 and MDM2, in vitro (PubMed:<a href="http://www.uniprot.org/citations/14592445" target=" blank">14592445</a>, PubMed:<a href="http://www.uniprot.org/citations/17631499" target=" blank">17631499</a>, PubMed:<a href="http://www.uniprot.org/citations/19303003" target=" blank">19303003</a>, PubMed:<a href="http://www.uniprot.org/citations/26882543" target=" blank">26882543</a>, PubMed:<a href="http://www.uniprot.org/citations/27993683" target=" blank">27993683</a>, PubMed:<a href="http://www.uniprot.org/citations/30165671" target=" blank">30165671</a>). The relevance of the protein lysine acetyltransferase activity is however unsure in vivo (PubMed: <a href="http://www.uniprot.org/citations/30449621" target=" blank">30449621</a>). Activates telomerase activity by stimulating the transcription of TERT, and may also regulate telomerase function by affecting the balance of telomerase subunit assembly, disassembly, and localization (PubMed:<a href="http://www.uniprot.org/citations/14592445" target=" blank">14592445</a>, PubMed:<a href="http://www.uniprot.org/citations/18082603" target=" blank">18082603</a>). Involved in the regulation of centrosome duplication by acetylating CENATAC during mitosis, promoting SASS6 proteasome degradation (PubMed:<a href="http://www.uniprot.org/citations/31722219" target=" blank">31722219</a>).

## **Research Area**



### **Image Data**



Western blot detection of NAT10 in Jurkat,C6,Hela cell lysates using NAT10 antibody(1:1000 diluted).

#### Note

For research use only.